

CLAIMS:

What is claimed is:

1. A transgenic non-human mammal whose genome comprises a nucleic acid construct, wherein said construct comprises a reporter nucleic acid encoding a
 5 reporter operably linked to a promoter comprising an androgen response element (ARE), and said construct further comprises an androgen receptor nucleic acid encoding an androgen receptor, and wherein expression of said reporter nucleic acid is regulated by expression of said androgen receptor nucleic acid.
2. The transgenic non-human mammal of claim 1 wherein said reporter is
 10 luciferase.
3. The transgenic non-human mammal of claim 1 wherein said androgen response element is 2XDR-1.
4. A cell isolated from the transgenic mouse of claim 1, wherein the genome of said cell comprises said nucleic acid construct.
- 15 5. The cell of claim 4 wherein said reporter is luciferase.
6. The cell of claim 4 wherein said androgen response element is 2XDR-1.
7. A mouse cell line comprising the cell of claim 4.
8. An isolated nucleic acid construct that comprises a reporter nucleic acid encoding a reporter operably linked to a promoter comprising an androgen response
 20 element (ARE), and said construct further comprises an androgen receptor nucleic acid encoding an androgen receptor, and wherein expression of said reporter nucleic acid is regulated by expression of said androgen receptor nucleic acid.
9. The construct of claim 8 wherein said reporter is luciferase.
10. The construct of claim 8 wherein said androgen response element is
 25 2XDR-1.
11. A method for obtaining a target mouse whose genome comprises a nucleic acid construct, wherein said construct comprises a reporter nucleic acid encoding a reporter operably linked to a promoter comprising an androgen response element (ARE), and said construct further comprises an androgen receptor nucleic acid
 30 encoding an androgen receptor, and wherein expression of said reporter nucleic acid is regulated by expression of said androgen receptor nucleic acid,

wherein said mouse can be bred to produce progeny mice whose genomes comprise said nucleic acid construct, said method comprising the steps of:

- (a) isolating a fertilized egg from a first female mouse;
- (b) transferring a transgene comprising said nucleic acid construct into the
5 fertilized egg;
- (c) transferring the fertilized egg of step (b) to the uterus of a pseudopregnant second female mouse; and
- (d) maintaining said second female mouse such that:
 - (i) said second female mouse becomes pregnant with an embryo
10 derived from said fertilized egg of step (c);
 - (ii) said embryo develops into said target mouse; and
 - (iii) said target mouse is viably born from said second female mouse;

wherein the genome of said target mouse comprises said nucleic acid construct and wherein said mouse can be bred to produce progeny mice whose genomes comprise
15 said nucleic acid construct.

12. A method for producing a transgenic mouse cell line that expresses a reporter nucleic acid, said method comprising:

- (a) isolating cells from the transgenic mouse of claim 1; and
- (b) placing the isolated cells under conditions to maintain growth and viability
20 of the isolated cells such that said transgenic mouse cell line expresses said reporter nucleic acid.

13. A method of screening for a modulator of the androgen receptor, comprising administering a test substance to the transgenic non-human mammal of claim 1 and assaying the effect of said test substance on the activity of the androgen
25 receptor.

14. A transgenic non-human mammal whose genome comprises a nucleic acid construct, wherein said construct comprises a reporter nucleic acid encoding a reporter operably linked to a promoter comprising an androgen response element (ARE), and said construct further comprises an androgen receptor nucleic acid
30 encoding an androgen receptor, and wherein said non-human mammal expresses said reporter nucleic acid in organs when said androgen receptor nucleic acid is expressed.